Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

had the leaves so much like the *Quercus Cerris* of Europe, that branches of the two mixed together could scarcely be separated; others came near in their resemblance the European *Quercus robur;* and again some near *Q. alba* of our own country. Did these species grow there, we should assuredly have the remark by the esteemed author of the "Manual." "Probably a hybrid between *Q. cerris* and Q. alba." It was only after many successive days of acquaintance with it, during which it had ranged from a low bush to a small tree—from leaves deeply lobed to leaves almost entire—from leaves of a deep shining green to leaves of a glaucous gray—trees with fruit pretty well matured, to others only just commencing to set their fruit—from long to short pedunculated, elongated to sub-rounded fruit—and so on through other changes—that he was forced to the conclusion that he had but one species to deal with, and such he believed would be the conclusion of any careful botanist.

Whatever may be ultimately accepted as the correct theory of evolution, the fact of evolution so great as to produce forms equal to the most decided species could scarcely be disputed; and this, too, as such cases as this of *Quercus Douglassii* proved, entirely removed from the hand of art, or the agency of hybridization.

MAY 28.

The President, Dr. RUSCHENBERGER, in the chair.

Thirty-six members present.

The following gentlemen were elected members of the academy: Jos. H. Ogden, Jos. E. Gillingham, D. S. Holman, J. W. Miller, P. P. Morris, and T. M. Drown, M.D.

Mons. E. Rivière, of Menton, France, was elected a correspondent.

On favorable report of the committees, the following papers were ordered to be printed.

Permission having been granted, Prof. COPE exhibited some vertebræ of a Plesiosauroid reptile and those of a smaller species, probably a *Clidastes*, which were found in close proximity near Sheridan, Kansas, by Joseph Savage, of Leavenworth. According to this gentleman, the vertebral column of the *Clidastes* was found immediately below that of the Plesiosauroid and in a reversed position, as though it had been swallowed by the latter or larger reptile. The largest vertebræ of the *Clidastes* were about three-quarters the length and one-fourth the diameter of those of the Plesiosauroid, and the animal must have furnished a large, or at least a long, mouthful for its captor. The bones of the *Clidastes* were not in good condition, but resembled those of *C. cineriarum*, Cope, though smaller.

The Plesiosauroid was new to science, being the third species discovered in the Cretaceous of the Niobrara group. Specifically it was nearest to the *Elasmosaurus platyurus*, Cope, but was readily distinguished by the relatively shorter cervical vertebræ, and the regular acute ridges on the exterior surfaces near the margin of the articular faces, as well as the less contracted form of all the vertebral centra. As the neural arches and the cervical parapophyses were not coössified with the centra, the species was referred to the genus *Plesiosaurus*, with the name *P. gulo*, Cope, and the following description:—

Specimen represented by eleven cervical, thirteen dorsal, and seven or eight other vertebræ, with portions of scapular and pelvic arch and ribs.

The cervicals are longer than wide, and considerably compressed in form anteriorly, but depressed posteriorly; this is partly due to pressure, but not wholly, and it is likely that the posterior centra are about as transverse as in *Cimoliasaurus magnus*, Leidy, while the anterior are relatively several times as long. In the length the latter resemble the English *Plesiosauri*, in which the centra are also compressed. The compressed anterior centra exhibit a ridge on the side above the middle. A more massive ridge extends between the articular extremities at the lower part of the side, and presents a pit for the parapophysis. The pit for the neural spine is of nearly similar size. Where the cervicals begin to be depressed, two foramina appear near together on the inferior face, and the articular extremities display an open obtuse emargination below. They are also emarginate for the neural canal above, so as to have a form approaching a transverse figure 8. In the large posterior cervicals the sides are contracted both below and at the sides. In all the cervicals the articular faces are a little concave, in the larger with some median convexities.

In none of the dorsals preserved are the diaphopyses seen to issue from the centra, hence they are probably not posterior in position. The centra soon become smaller than those of the posterior cervicals, and are subround in section, with a well-marked emargination for the neural canal. The sides are gently concave, and are without angulation, but are marked near the articular extremity with short, sharp, and regular undivided ridges, eight in a half inch. The articular faces are slightly concave and without ridges. There are the two inferior foramina, and one on the lower part of each side. The articular face for the neural arch is an oval pit extending the length of the centrum and interrupted by some transverse ridges near the middle. The vertebræ diminish in size posteriorly. Two centra, probably sacral, resemble the dorsals, but present an extensive vertical articular surface on each side. This has raised edges and terminates above in the longitudinal surface for the neural arch, having thus a T-shape. It narrows below to an obtuse point, and no doubt supported a free diapophysis.

The fragments of the pelvic and scapular arches indicate that they were capacious. The clavicle inclosed a large foramen, was rather narrow, and thickened on the inner edge. Its glenoid surface was wide and sub-rhomboid. Some of the other bones were quite thin.

MEASUREMENTS.

	M.
Length of anterior cervical	0.062
Depth articular face do.	.050
Width of articular face do.	.050
Length of posterior cervical	.070
Depth articular face do.	.052
Width " "	.090
Distance between parapophysi	.048
Length anterior dorsal	.059
Depth articular face do.	.062
Width " "	.072
" neural canal on centrum	.017
Long diameter proximal end clavicle	.114

Associated with these remains were those of a turtle of the size of some of the large *Cheloniidæ* of recent seas. The only portions were the scapulo-procoracoid, the coracoid, and the mandible nearly complete. The two former were like those of *Chelydra;* the procoracoid issuing nearly at the articular extremity, and the coracoid being of moderate elongation and much expanded distally, and with nearly straight axis. The mandibular rami were remarkably slender and with correspondingly short symphysis. The tomia obtuse and directed outwards, the apex flat and obtuse. Coronoid process slightly elevated; articular bone osseous. Length coracoid .250 m.; diameter distally .080; distal width of scapula .058; length ramus of mandible .150; length symphysis .030.

The general characters of this form were thought to agree with *Cynocercus*, Cope, though the individual was larger than that on which the *C. incisus* was established.